

SC Ag-Watch: Protecting Animal Agriculture in South Carolina  
Biosecurity Levels For All Ag Personnel Visiting Animal Related Facilities  
Updated 4/4/06

**Routine Biosecurity Measures for Visits to Animal Related Facilities**

Biological security measures should be considered standard operating procedures in animal agriculture sectors. These controls are meant to minimize the risk of disease introduction and spread. Control measures will vary according to type of operation and location of site. Personnel working with livestock, poultry and other animal industries must take steps to ensure a reasonable level of biosecurity is practiced in order to protect themselves, producers and the industries. Commercial company personnel and growers must avoid any contact with livestock markets and noncommercial livestock and poultry.

The steps outlined below are the minimum standards that should be followed by all persons conducting visits to farms or any other animal related facilities. Owners and producers may require more stringent biosecurity measures that should be followed accordingly, including confinement units requiring shower-in / shower-out at entry and exit respectively, etc.

If there is an outbreak of a highly contagious disease refer to the prevention and rapid response plan and individual company policies for increased biosecurity measures.

**Biosecurity Levels**

Routine levels of biosecurity are described below depending on the amount of contact there is with animals or their environment. Pre-plan the needed supplies and clothing required for each biosecurity level. These steps should be repeated for each premise that is visited. When in doubt as to which level of biosecurity is needed, choose the higher level.

- Level 1 – No Animal or Housing Contact
- Level 2 – Animal Housing Contact, No Direct Animal Contact
- Level 3 – Direct Animal or Housing Contact
- Level 4 – Diseased Direct Animal or Housing Contact

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<b>Level 1 – No Animal or Housing Contact</b>
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To be followed when visits to farms or facilities involve office or home visits only with no contact with animals or their housing area. Examples include visits to a farm office, livestock sales establishment office or general public areas.

- Supplies needed: work clothing and footwear that are free of organic debris.
- Park your vehicle in such a manner to avoid driving your vehicle into or through animal production sites. If you must drive through animal production areas, assure that vehicle tire and wheel wells are appropriately cleaned (free of organic debris) and disinfected prior to leaving the premises. If this cannot be accomplished on the premise, then clean and disinfect at the nearest location (e.g. car wash). Keep vehicle windows closed to reduce insects inside the vehicle.
- Clothes and footwear should be free of organic debris
- If possible, avoid animal areas, pens, barns, etc.
- Assure hands are clean before entering and after leaving the premises.
- Remove as many insect vectors from vehicle as possible.

<b>Level 2 – Animal Housing Contact, No Direct Animal Contact</b>
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To be followed when visits involve animal production areas with no direct or minimal contact with the animals. Animal contact should be kept to the minimal level necessary to attain the goal of the visit. Minimal contact constitutes walking through animal housing areas when the animals are not within reach. Examples include livestock sales establishment or fair/show visits with no physical contact with animals, animal appraisals and tour of animal production facilities.

- Supplies:        Work clothing and footwear those are free of organic debris.  
                      Clean rubber boots or new disposable (6 mil) boot covers  
                      Bucket, brush, disinfectant, boot pick or garbage bags
- Wear clean rubber boots or new disposable boot covers upon exiting the vehicle. Disposable boot covers should be worn only when performing limited activities to avoid damaging the plastic and compromising biosecurity.
- After returning to your vehicle, clean and disinfect any reusable equipment that was used, including rubber boots, with a brush and USDA approved disinfectant solution. Dispose of disinfectant solution appropriately and in accordance with label directions.
- If wearing disposable boots, remove and dispose in a manner that prevents exposure to other animals. Place in trash receptacle on the farm (near vehicle), or place in a garbage bag in your vehicle to dispose later.

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### Level 3 – Direct Animal or Housing Contact

To be followed when there is close or direct contact with animals. Examples include walking through narrowly confined areas where animals are within reach, manure pit inspections or actually handling/inspecting the animals.

- Supplies:
  - Coveralls over clothing – clean cloth or disposable
  - Clean rubber boots or new disposable (6 mil) boot covers
  - Head covering – disposable bouffant or head gear that can be sanitized after each visit
  - Bucket, brush, disinfectant, boot pick
  - Garbage bags
  - Disposable gloves
  - Hand held (garden) sprayer
  - Water container (min. 1 gallon)
  - Hand sanitizer
  - (These items should remain in the vehicle at all times)
- Wear biosecurity clothing upon exiting the vehicle. Disposable boot covers should be worn only when performing limited activities to avoid damaging the plastic and compromising biosecurity.
- Designate “clean” and “dirty” areas or covered tubs in your vehicle to store and dispose of clothing and equipment.
- After returning to your vehicle, clean and disinfect any reusable equipment that was used, including rubber boots, with a brush and USDA approved disinfectant solution. Dispose of disinfectant solution appropriately and in accordance with label directions.
- Remove biosecurity clothing and disposable equipment and place in a plastic bag, then place bag into “dirty” area or tub.
- Use hand sanitizer prior to entering your vehicle.
- Take precautions to ensure inside of vehicle remains clean so that your work clothes, clean coveralls and equipment do not become contaminated. Plastic and removable floor mats should be available for each person to disinfect.
- Vehicle tires and wheel wells should be sprayed with disinfectant prior to leaving the premise or vehicle driven through a car wash.
- At the end of the day, dispose of plastic trash bags that contain dirty supplies in a manner that prevents exposure to other animals. Launder all coveralls and/or clothing. Personal hygiene should include shampooing hair and cleaning under fingernails.

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<b>Level 4 – Diseased Direct Animal or Housing Contact</b>
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To be followed when confirmed or suspected highly contagious disease exists (Foot & Mouth Disease, avian influenza, etc). Visitors to farms or concentration points must follow this protocol when there is close contact with animals or their housing. More stringent measures may be necessary depending on the specific disease and zoonotic potential.

- Supplies:
  - Disposable coveralls (e.g. Tyvek) – preferably waterproof
  - Clean rubber boots or new disposable (6 mil) boot covers
  - Disposable head covering
  - Dust mask
  - Goggles
  - Duct tape
  - Waterproof (rainsuit) pants & long sleeve jacket)
  - Bucket, brush, disinfectant, boot pick
  - Garbage bags
  - Zip lock bags (box of 1 qt. & 1 gallon each)
  - Disposable gloves
  - Hand held (garden) sprayer
  - Water container (min. 1 gallon)
  - Hand sanitizer
  - Sharps container
  - Necessary sampling supplies/equipment
- Level 4 requires additional personal protective clothing. The timing of premises visit should be scheduled (i.e. early morning, night, etc.) to reduce risk of animal disease spread and minimize personal health risk caused by extreme environments factors (heat).
- Vehicles must not be taken onto premises near the animal barns/pens. Vehicles must be parked on a public road right-of-way and personnel must walk onto premises. If the driveway is long, park the vehicle at least ¼ mile from the barns/pens.
- Appropriate disinfectant for disease situation must be used and in accordance with label instructions and dilution.
- A disposable (e.g. Tyvek) suit must be worn with rubber boots or disposable booties, disposable gloves, disposable head covering and dust mask. Duct tape may be necessary to seal gloves and Tyvek sleeve and boots and Tyvek pant leg. A waterproof suit (pants and long sleeve jacket) may also be necessary, depending upon conditions. Use best judgment or seek direction from your supervisor.
- Personal protective equipment should be used if the disease is suspected or determined to be zoonotic (spread from animals to humans). This includes eye protection or respiratory protection (disposable particulate respirator, e.g. N95, N99 or N100, and close fitting goggles) in case of airborne pathogens that could be mechanically spread by mucous membrane contamination. This could be

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- especially important in confinement housing and dusty environments. Use best judgment or seek direction from your supervisor.
- Spare disposable gloves must be taken with you stored in sealed plastic bag (e.g. zip lock bags taped to front of suit) that will be disposed before leaving premises.
  - The minimum amount of equipment necessary should be taken onto premises. All equipment taken onto premises must stay on site or be disinfected before leaving the premises. Mobile phones, watches, and other items that are necessary, but cannot be disinfected should be maintained in sealed waterproof bags while on the premises. If photos must be taken for documentation, a disposable waterproof camera is recommended.
  - A disinfection point (dirty/clean line) should be set up just outside the premises before entering.
  - When leaving the site, all disposable items that have been used (garbage, waterproof bags, disposable suits, etc.) must be placed in a sealed, heavy gauge plastic bag. The sealed bag must be dipped in or thoroughly sprayed with appropriate disinfectant and placed in a second sealed, heavy gauge plastic bag and carried to an identified disposal center.
  - When leaving the site, reusable waterproof suits and rubber boots must be thoroughly cleaned and disinfected, paying particular attention to boot treads, pockets and inside pant legs. Exposed area of skin including the face, hands and wrists should be cleaned with soap and water or sanitizer and nails scrubbed. Watches and other items must be disinfected (if not maintained in a waterproof bag). Cleaned and disinfected waterproof suits and rubber boots must be placed in a sealed plastic bag in your vehicle; they may require further cleaning and disinfection.
  - Vehicle tires and wheel wells must be cleaned and disinfected prior to leaving the roadside. Prior to visiting another premises or going home, your vehicle must be washed, preferable at an automatic car wash center.
  - At the end of the day, dispose of plastic trash bags that contain dirty supplies in a manner that prevents exposure to other animals. Personal hygiene should include shampooing hair and cleaning under fingernails.

Source: GA Department of Agriculture (May, 2005); NC Department of Agriculture & Consumer Services (October, 2005)